

Work Order ID 59446

Friday, June 04, 2010 11:24:31 AM



Page 1

Item ID: D5953

Accept



Setup Start



Revision ID:

Item Name: Saddle, 205

Stop



Start Date: 6/4/2010 Start Qty: 6.00



Cust Item ID:

Required Date: 6/10/2010 Req'd Qty: 6.00



Customer:

Reference:

Approvals:

Process Plan:

[Signature]

Date:

10-6-04

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D5953

Rev B

100

0.00



HAAS CNC VERTICAL MACHINING #1

HAAS 1

Memo

0.00

HAAS CNC vertical machine #1

1-Machine as per folio D5953, Ensure Batch Number is entered
Keyway 3-Deburr & Tumble

DJP 10/06/23 mwa 10/06/24

6 3

PTO

110

0.00



QC1- Inspect dimensions to dimension sheet

QC

Memo

0.00

Quality Control

DJP 10/06/23 mwa 10/06/24

6 3

120

0.00



QC8- Inspect parts - second check

QC

Memo

0.00

Quality Control

AS 10/06/24

(6) (3)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: 15953 PAR #: _____ Fault Category: machined parts NCR: Yes No DQA: _____ Date: 10-06-25
 Resolution: Scrap Disposition: Scrap QA: N/C Closed: 10/07/01 Date: 10/07/01

NCR: <u>59446</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
10/06/23	100	Scrap first part on 4 Axis. Plastic bore on 4 Axis makes part crooked. Cause by tooling.	P 10/06/24 Q5042	Scrap and replace Blk # <u>58677</u> Remove plastic bore	MWA 10/06/24	10/05/25	P 10/06/24 Q5042	10/06/25
10-06-25	100	" "	U 10-06-28	Above NCR resulted in a 2nd scrap saddle (qty 1) Previous shift did not run a next part & tooling/set-up was not adjusted.	10/06/24 mw	11/05/25	U 10-06-28	10/06-25
10/06/25	100	Part scrap because machine crash and move vice, part was machine way off in X axis. Program proceeded to machine. Cause EC: wrong tool? origin? →	U 10-06-28	Scrap and replace Blk # <u>59621</u> (HAAS # 2 in keywords)	mw 10/06/25	10/05/25	U 10-06-28	10/06-25

NOTE: Date & initial all entries tool hitting vice & operator did not
notice. LQA.

Work Order ID 59446

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Page 2

Item ID: D5953

Accept



Setup Start



Revision ID:

Item Name: Saddle, 205

Stop



Start Date: 6/4/2010 Start Qty: 6.00



Cust Item ID:

Required Date: 6/10/2010 Req'd Qty: 6.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1 Memo	0.00 0.00	<i>MS</i>	<i>10/06/28</i>		<i>X6</i>	<i>0</i>		
140 Powdercoat Powder Coating	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum <i>M 114 841</i> Memo START TIME: <i>2:35</i> <input type="checkbox"/> OVEN TEMPERATURE: <i>320°</i> <input type="checkbox"/> FINISH TIME: <i>3:05</i>	0.00 0.00							
150 QC Quality Control	QC3- Inspect Part Finish Memo	0.00 0.00	<i>=> MS</i>	<i>10/07/01</i>		<i>6</i>	<i>0</i>		

6 Bl 10-6-30.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 59446

Friday, June 04, 2010 11:24:31 AM

Page 3

Item ID: D5953

Accept

Revision ID:

Item Name: Saddle, 205

Start Date: 6/4/2010 Start Qty: 6.00

Required Date: 6/10/2010 Req'd Qty: 6.00

Reference:

Cust Item ID:

Customer:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

160



Packaging

Packaging

Identify as per dwg & Stock Location: Y30

0.00

Memo

0.00

170



QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

(Signature) 6/7/01 *(Signature)*

10/07/01 *(Signature)*

CL 10/7/11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Friday, June 04, 2010 11:24:35 AM

Page 1

Work Order ID: 59446

Parent Item: D5953

Parent Item Name: Saddle, 205

Comments: IPP Rev:E Re-Format 05-11-29 JLM
IPP Rev:f ecn 826 06.12.06 EC

Start Date: 6/4/2010

Required Date: 6/10/2010

Start Qty: 6.00

Required Qty: 6.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D6101-007		Manufactured	No			100	Each	52.0000	1	6			



Saddle Billet



Location

Loc Qty

Loc Code

MAT42

52

46412

2

58677

50

Handwritten notes and signatures:

- ms* (top right)
- B 596* (middle right)
- 10/06/24* (top right)
- 6* (bottom left of notes)
- DJP* (signature)
- 10/06/23* (bottom right)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	594144
Description: Inner Fwd Saddle		Part Number:	D5953
Inspection Dwg: D5953	Rev: B	Page 1 of 1	

Inspect dimensions highlighted on inspection sheet drawing and record below:

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	By	Date
A	0.438	0.443			.440	.440	.440		
B	1.745	1.755			1.750	1.751	1.750		
C	5.245	5.255			5.250	5.248	5.249		
D	6.995	7.005			7.001	6.999	6.998		
E	5.240	5.260		5.250	5.250	5.248	5.248		
F	4.745	4.755		4.750	4.750	4.748	4.749		
G	0.315	0.322		0.321	.321	.321	.321		
H	1.522	1.532		1.527	1.527	1.528	1.526		
I	3.048	3.058		3.053	3.053	3.053	3.052		
J	4.575	4.585		4.580	4.580	4.580	4.579		
K	0.315	0.322		0.321	.321	.321	.321		
L	0.495	0.505		0.500	.500	.500	.500		
M	0.490	0.510		0.501	.499	.500	.499		
N	1.615	1.635		1.625	1.618	1.625	1.626		
O	7.990	8.010			8.003	8.002	8.001		
P	2.240	2.260			2.248	2.260	2.253		
Q	0.307	0.312			.310	.310	.310		
R	0.760	0.765			.760	.760	.760		
S	0.490	0.510			.490	.505	.493		
T	1.375	1.395		1.3895	1.388	1.391	1.388		
U	2.000	2.020			2.001	2.010	2.001		
V									
W									
X									
Y									
Z									
AA									
AB									
AC									
AD									
AE									
AF									
Accept/Reject									

Measured by: *[Signature]*
Date: 10/06/23

Audited by: *[Signature]*
Date: 10/06/28

Rev	Date	Change	Revised by	Approved
A	99.04.19	New Issue	RF	
B	02.12.13	Reformat; Added Dim. T-U & DT8682, DT8686 & DT8696 A/B	KJ/RF	
C	06.12.06	Dimensions L,N,P revised	KJ/EC	
D	07.06.15	Dimension G revised	KJ/JLM	
E	08.04.21	Dimension E revised	KJ/DD	
F	08.12.01	Dimension K revised	KJ/DD	

DART AEROSPACE LTD		Work Order: 59444
Description: Inner Fwd Saddle		Part Number: D5953
Inspection Dwg: D5953	Rev: B	Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing and record below:

				Recorded Actual Dimensions				By	Date
Dim	Min	Max	Go/No Go Gauge	5	6	7	8		
A	0.438	0.443		.440	.440	.440	.440		
B	1.745	1.755		1.749	1.749	1.749	1.749		
C	5.245	5.255		5.248	5.248	5.249	5.250		
D	6.995	7.005		6.998	6.999	6.998	6.999		
E	5.240	5.260		5.248	5.248	5.248	5.248		
F	4.745	4.755		4.748	4.748	5.748	5.748		
G	0.315	0.322		.321	.321	.321	.321		
H	1.522	1.532		1.526	1.526	1.526	1.526		
I	3.048	3.058		3.052	3.053	3.053	3.053		
J	4.575	4.585		4.581	4.580	4.580	4.580		
K	0.315	0.322		.321	.321	.321	.321		
L	0.495	0.505		.500	.500	.500	.500		
M	0.490	0.510		.500	.500	.497	.497		
N	1.615	1.635		1.622	1.623	1.619	1.620		
O	7.990	8.010		8.002	8.002	8.001	8.001		
P	2.240	2.260		2.254	2.260	2.260	2.260		
Q	0.307	0.312		.308	.310	.309	.309		
R	0.760	0.765		.760	.760	.760	.760		
S	0.490	0.510		.501	.499	.499	.499		
T	1.375	1.395		1.388	1.391	1.385	1.386		
U	2.000	2.020		2.001	2.009	2.013	2.014		
V									
W									
X									
Y									
Z									
AA									
AB									
AC									
AD									
AE									
AF									
Accept/Reject									

Measured by: <i>ms</i>
Date: 19/02/24

Audited by: <i>SA</i>
Date: 10/06/24

Rev	Date	Change	Revised by	Approved
A	99.04.19	New Issue	RF	
B	02.12.13	Reformat; Added Dim. T-U & DT8682, DT8686 & DT8696 A/B	KJ/RF	
C	06.12.06	Dimensions L,N,P revised	KJ/EC	
D	07.06.15	Dimension G revised	KJ/JLM	
E	08.04.21	Dimension E revised	KJ/DD	
F	08.12.01	Dimension K revised	KJ/DD	

W/O:			WORK ORDER CHANGES					
DATE	STEP		PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:			WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP		Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
				Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

SHOP COPY

RETURN TO

ENGINEERING

UNCONTROLLED

SUBJECT TO

WITHOUT NOTICE

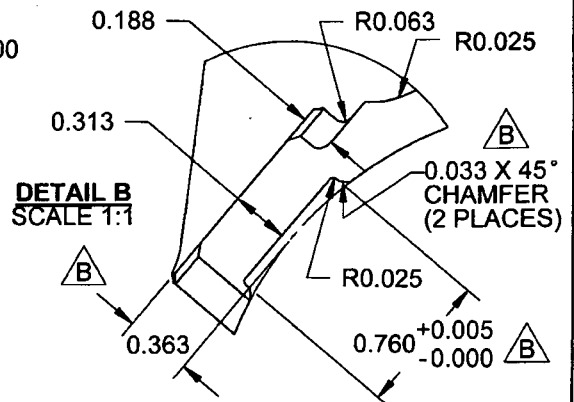
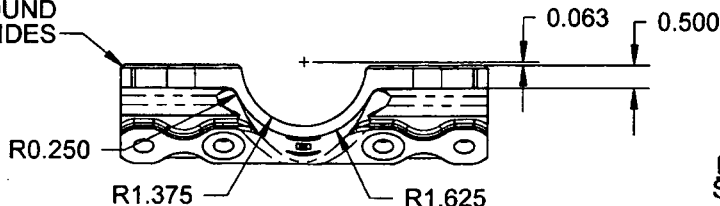
WORK ORDER

DART

DESIGN BW	DRAWN BY CB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED LE	APPROVED [Signature]	DRAWING NO. D5953	REV. B SHEET 1 OF 1
DATE 06.11.07	TITLE INNER FWD SADDLE SCALE 1:4		
REV A	DATE 97.05.06	DESCRIPTION NEW ISSUE	
B	06.11.07	INCORPORATE DEO 9102, DEO 9079; ADD 0.363 DIMENSION; $\phi 0.316$ WAS $\phi 0.313$; ADD TOLERANCE TO R2.000; ADD 0.363 DIM	

NO. **39144**
2810-6-04
RELEASED
06.11.28

CHAMFER
0.075 X 45°
ALL AROUND
BOTH SIDES



ENGRAVE PART NO.
AND BATCH NO.
WITH MIN RAD OF
0.010 TO MAX
DEPTH OF 0.010

R0.500
 $\phi 0.316$
(8 PLACES)

DRILL $\phi 0.316$ THRU
 $\phi 0.750$ SPOT FACE
(2 PLACES)

$\phi 0.920$ SPOT FACE
(2 PLACES)

GRAIN
DIRECTION

R0.660
 $\phi 0.438$
(4 PLACES)

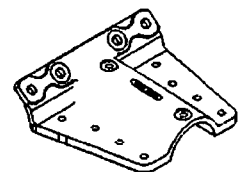
0.500
1.750
5.250
7.000
8.000
0.040 X 45° CHAMFER
ALL AROUND

VIEW A-A

D5953 INNER FWD SADDLE

NOTES:

- 1) MATERIAL: ALUMINUM 7075-T7351 PER QQ-A-250/12
(MAKE FROM D6101-007 SADDLE BILLET, 7075)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT GLOSS WHITE (4.3.5.1) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP EDGES 0.010 TO 0.020



ISOMETRIC VIEW
SCALE 1:8

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W/O:			WORK ORDER CHANGES					
DATE	STEP		PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:			WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP		Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
				Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries